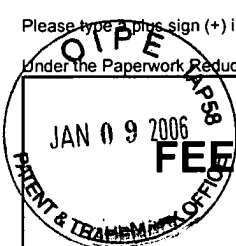


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FEE TRANSMITTAL

*Note: Effective December 8, 2004.
Patent fees are subject to annual revision.*

Complete If Known

Application Number	09/927,103
Filing Date	August 10, 2001
First Named Inventor	Michael Priestley
Group Art Unit	2165
Examiner Name	Neveen Abel-Jalil
Attorney Docket Number	CA920010055US1

TOTAL AMOUNT OF PAYMENT **\$500**

METHOD OF PAYMENT (check one)

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:

Deposit Account Number: _____

Deposit Account Name: _____

- ☐ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17 ☐ Charge the Issue Fee In 37 CFR at the Mailing of the Notice of Allowance

2. ☒ Payment Enclosed:

☒ Check ☐ Money Order ☐ Other

FEE CALCULATION

1. FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1011	300	2011	150	Utility filing fee	
1111	500	2111	250	Utility search fee	
1311	200	2311	100	Utility examination fee	
1084	250	2004	125	Utility size fee for each additional 50 over 100	
1005	200	2005	100	Provisional filing fee	

SUBTOTAL (1)

\$

2. CLAIMS

Total Claims	Extra	Fee from below	Fee Paid
<input type="text" value="20"/>	-20 =	0 x 50 =	
<input type="text" value="3"/>	-3 =	0 x 200 =	
Multiple Dep. Claims		0 x 360 =	0

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	50	2202	25	Claims in excess of 20
1201	200	2201	100	Independent claims in excess of 3
1203	360	2203	180	Multiple dependent claim
1204	200	2204	100	Reissue independent claims over original patent
1205	50	2205	25	Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

0

*Reduced by Basic Filing Fee

SUBTOTAL (3)

\$ 500

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2520	1812	2520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1840*	1805	1840*	Requesting publication of SIR after Examiner action	
1251	120	2251	60	Extension for reply within first month	
1252	450	2252	225	Extension for reply within second month	
1253	1020	2253	510	Extension for reply within third month	
1254	1530	2254	765	Extension for reply within fourth month	
1255	2160	2255	1080	Extension for reply within fifth month	
1401	500	2401	250	Notice of Appeal	
1402	500	2402	250	Filing a brief in support of an appeal	500
1403	1000	2403	500	Request for oral hearing	
1451	1510	1451	1510	Petition to institute a public use proceeding	
1452	500	2452	250	Petition to revive -unavoidably	
1453	1500	2453	750	Petition to revive - unintentional	
1501	14000	2501	700	Utility issue fee	
1502	800	2502	400	Design issue fee	
1503	1100	2503	550	Plant issue fee	
1464	130	1464	130	Petitions to the Commissioner	
1807	50	1807	50	Petitions related to provisional applications	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1801	790	2801	395	Request for continued examination (RCE) (37 CFR 1.114)	
1809	790	2809	395	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	790	2810	395	For each additional invention to be examined (37 CFR 1.129(b))	

Other fee (specify) _____

SUBMITTED BY

Complete (if applicable)

Typed or Printed Name	David J. McKenzie	Reg. Number	46,919
Signature		Deposit Account User ID	
Date	Jan 5, 2006		

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA, 20213-1450, on January 5, 2006.

David J. M. [Signature]
Attorney for Applicant

PATENT

Docket No. CA920010055US1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Michael Priestley)	
Serial No.:	09/927,103)	
Filed:	August 10, 2001)	
For:	LINK MANAGEMENT USING DOCUMENT)	
	STRUCTURES)	Group Art
Examiner:	Abel-Jalil, Neveen)	Unit: 2165
)	

REPLY BRIEF

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Examiner:

Appellant filed a timely Notice of Appeal on December 12, 2005, which was filed in response to the Office Action mailed December 2, 2005 in which the Examiner seeks to reopen prosecution based on a new prior art reference; the Examiner's action was in response to an Appeal Brief filed June 1, 2005. The Office Action mailed December 2, 2005 was sent as a corrective action in view of a telephone interview held with Applicant's Attorney November 17, 2005. The Office Action mailed December 2, 2005 restarted the period for reply. Appellant would like to reinstate the appeal initiated April 1, 2005. Appellant submits that if the Office Action mailed December 2, 2005 restarted the period for reply, the opportunity to reinstate the

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appeal should also exist. If that appeal was dismissed due to passage of a two month period following the erroneous Office Action, Appellant does by the Notice of Appeal filed December 12, 2005 initiate an new appeal since the claims at issue have been more than twice rejected. MPEP §1204 I.

Appellant appeals the rejection of, and objections to, pending Claims 1-21. This Appeal Brief is being filed as a Reply Brief under the provisions of 37 C.F.R. § 41.41 to reinstate the previous appeal. If it is determined that the original appeal has been dismissed, Appellant requests that this Reply Brief be considered an original Appeal Brief under 37 C.F.R. § 41.37. The filing fee set forth in 37 C.F.R. § 41.20(b)(2) of \$500.00 is submitted herewith in the event that the original appeal has been dismissed. The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication, or to credit any overpayment, to Deposit Account No. 09-0460. If it is determined that the original appeal has not been dismissed, Appellant requests reinstatement of that appeal, that no fee be charged for this Reply Brief, and that the Notice of Appeal fee charged for the Notice of Appeal filed December 12, 2005 be refunded to Deposit Account No. 09-0460.

1. REAL PARTY IN INTEREST

The real party in interest is the assignee, International Business Machines Corporation, Armonk, New York.

2. RELATED APPEALS AND INTERFERENCES

As noted above, there may be an existing appeal which this Reply Brief is intended to reinstate. If that appeal has been dismissed, then there are no related appeals. There are no related interferences, or judicial proceedings.

3. STATUS OF CLAIMS

The Office Action mailed December 12, 2005 attempts to reopen prosecution. Therefore, Appellant notes that the rejections in the Final Rejection mailed December 8, 2004 have been withdrawn. The Office Action mailed December 12, 2005 rejected Claims 1, 8, and 15 under 35 U.S.C. §102(e) as being unpatentable over U.S. Patent No. 6,122,647 to Horowitz et al.

(hereinafter “Horowitz”). Claims 2-7, 9-14, and 16-21 were objected to, but found allowable if amendments were made to overcome the rejections to the respective independent and intermediate claims.

A telephone interview was held with Examiner Neveen Abel-Jalil, Mr. Charles Rones, and Appellant’s Attorney David McKenzie on November 17, 2005. In that interview, Claim 1 language reciting “user determined relative hierarchical order” was discussed in relation to Horowitz. No agreement was reached. In response, Appellant appeals the rejection of Claims 1, 8 and 12 and the objection to Claims 2-7, 9-14, and 16-21.

4. STATUS OF AMENDMENTS

Appellant did not propose amendments in the Appeal Brief filed June 1, 2005.

5. SUMMARY OF CLAIMED SUBJECT MATTER

The claimed subject matter deals with performing link management for units of information such as web pages, help files, and the like. See Spec. page 1, lines 4-5. Specifically, the claimed invention links units of information together based on a hierarchy encoded in a listing of identifiers. See Spec. page 4, lines 21-27.

The problem addressed is facilitating rapid creation of links between a collection of units of information, such as a collection of web pages. See Spec. page 1, lines 7-13. One conventional tool for inter-linking units of information relies on a user to manually add, delete, or modify links between units of information. See Spec. page 2, lines 7-9. Manually inter-linking large numbers of units of information is inconvenient and difficult. See Spec. page 2, lines 12-20. Another conventional tool for inter-linking units of information uses a compiler to read programmed instructions for inter-linking the units of information. See Spec. page 2, lines 21-28. A developer proficient in a computer programming language creates the programmed instructions. See Spec. page 4, lines 3-6. When new units of information are added to a collection, the developer changes the programmed instructions to create links to the new units of information. See Spec. page 3, lines 20-24. This tool requires the developer to become proficient in creating programmed instructions, which may be inconvenient and costly. See Spec. page 4, lines 3-19.

Embodiments of the present invention include a method, a system, and a computer program product for performing link management of document structures.¹ See e.g. Claims 1, 8, and 15. The system of Claim 1 includes means for storing a list of identifiers, examining the identifiers, and linking a unit of information to at least one other unit of information based on the relative hierarchical order of at least two identifiers. See Fig. 3.

The following references are illustrative of an embodiment of the system of Claim 1. A link manager reads the list of identifiers to determine a hierarchical relationship between identifiers and the units of source information the identifiers represent. See Spec. page 9, lines 18-20. The link manager then generates units of target information including content from a unit of source information and one or more links to other units of target information. See Fig. 4 and Spec. page 9, lines 24-25 and page 10, lines 1-2.

Figures 5A and 5B illustrate the generation of units of target information 512A-512G from units of source information 502A-502J based on a list of identifiers 508A-508G. In one embodiment, a listing 604 stores a list of identifiers in a hierarchy based on the relative nesting and order of the identifiers. See Fig. 6. Figure 6 illustrates that the listing 604 is a human readable structure that is separate and distinct from the source information 602 and the target information 608. Units of target information 608 comprise the content of units of source information 602 and links to other units of target information. The system uses the relative nesting and order of the identifiers in the listing 604 to determine how the units of target information are to be linked. See Figs. 7-8. Flow chart diagrams 900 and 920 illustrate how the system determines a relationship between identifiers and uses the relationship to generate a unit of target information. See Figs. 9A and 9B.

Claims 8 and 15 include substantially the same subject matter as that described above in relation to Claim 1. Regarding the computer program product of Claim 15, computer readable program code directs the creation and management of links between units of information based on a list of identifiers arranged in hierarchical order. The computer program product implements

¹ Although Appellant has summarized embodiments of the present invention, the present invention is defined by the claims themselves. Appellant's summary is not intended to limit the scope of the claims or individual claim elements in complying with the appeal brief requirements under 37 C.F.R. § 41.37(c)(v).

storing identifiers, examining identifiers to determine the hierarchical order of the identifiers, and linking a unit of target information to at least one other unit of target information based on the relative hierarchical order of the identifiers. See Spec. page 5, lines 23-28 and page 6, lines 1-6.

Additionally, an embodiment of the present invention includes a system claimed in means plus function format under 35 U.S.C. § 112, sixth paragraph. Examples of the structure, material, or acts corresponding to the means recited in claims 1, 2, 4, and 6 are referenced below.

With regard to Claim 1, the memory 320 is one example of the means for storing a list of identifiers. See Fig. 3; Spec. page 8, line 7. Document Object Model APIs are one example of the means for examining the list of identifiers to determine the hierarchical order of the identifiers within the list of identifiers. See Spec. page 8, lines 7-10. Hypertext links are one example of the linking means. See Spec. page 8, lines 10-13.

With regard to Claims 2 and 4, a mechanism having discreet electronic/electrical components or hardware is one example of the generating means, the examining means, and the insertion means. See Spec. page 9, lines 6-12. A mechanism comprising computer coded software instructions or modules is another example of the generating means, the examining means, and the insertion means. See Spec. page 9, lines 6-13. A mechanism comprising a hybrid system having some hardware and some software modules is a further example of the generating means, the examining means, and the insertion means. See Spec. page 9, lines 6-15.

The claimed invention provides a simple, flexible way of linking units of information together based on a user determined hierarchy encoded in an explicit listing of identifiers. The user may impose a hierarchy within the list of identifiers by using simple identifier arrangements such as indentations, adjacent locations, and tables. A user may easily manipulate the listing since the listing may be a simple text file similar to the listing 506 illustrated in Fig. 5A, the HTML or XML listing 604 illustrated in Fig. 6, or the simple HTML table listing 1004 illustrated in Figure 10. See Figs. 5A, 6, 10; Spec. page 10, lines 8-14, page 12, lines 18-24, page 16, lines 24-28.

A user may alter the way units of information are linked by simply editing the listing. For example, as a result of indenting a first identifier and not indenting a second identifier within a listing, a parent/child link may be created so that the unit of information represented by the indented identifier is a child to the unit of information represented by the identifier not indented.

See Spec. page 11, lines 20-27. A user could easily modify the relationship between the units of information to be a previous/next relationship rather than a parent/child relationship by simply editing the listing to remove the indentation of the first identifier.

Editing a simple list of identifiers allows a user to rapidly create or modify links between units of information. This is a significant improvement over conventional approaches that require manual linking or learning programming languages. See Spec. page 4, line 17 and page 5, lines 1-4.

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

I. Whether the Examiner fails to establish a *prima facie* case of anticipation under 35 U.S.C. § 102(e) for Claims 1, 8, and 15 where the limitations of the claims are not taught or suggested within the cited reference.

7. ARGUMENT

I. The Examiner failed to establish a *prima facie* case of anticipation under 35 U.S.C. § 102(e) for Claims 1, 8, and 15 because the limitations of the claims are not taught or suggested within the cited reference.

INDEPENDENT CLAIMS 1, 8, and 15

A. Independent Claims 1, 8, and 15

Appellant respectfully submits that independent Claim 15 is representative of the patentable subject matter of Claims 1 and 8. Appellant further submits that Claim 15 is not anticipated by Horowitz. Claim 15 states:

A computer program product for use in a computer system operatively coupled to a computer readable memory, the computer program product including a computer-readable data storage medium tangibly embodying computer readable program code for directing said computer to create and manage links amongst units of information based on a list of identifiers arranged in an hierarchical order wherein each identifier identifies an associated unit of information, said computer program product comprising:

- code for instructing said computer system to store said list of identifiers, wherein said list of identifiers has a user determined relative hierarchical order to direct a link management system in the creation of said links;
- code for instructing said computer system to examine said list of identifiers to determine the hierarchical order of said identifiers within said list of identifiers;
- code for instructing said computer system to link a unit of information to at least one other unit of information based on the relative hierarchical order of identifiers including:
 - an identifier identifying said unit of information; and
 - another identifier identifying said at least one other unit of information.

B. The Rejection under 35 U.S.C. § 102(e)

The Office Action mailed December 2, 2005 rejects Claims 1, 8, and 15 under 35 U.S.C. §102(e) as being unpatentable in view of Horowitz. The Office Action suggests that Horowitz

teaches each element of Claim 1. Specifically, the Office Action, mailed December 2, 2005, states:

As to claims 1, 8, and 15, Horowitz et al. discloses a computer program product for use in a computer system operatively coupled to a computer readable memory, the computer program product including a computer-readable data storage medium tangibly embodying computer readable program code for directing said computer to create and manage links amongst units of information based on a list of identifiers arranged in an hierarchical order wherein each identifier identifies an associated unit of information, said computer program product comprising:

code for instructing said computer system to store said list of identifiers, wherein said list of identifiers has a user determined relative hierarchical order to direct said link management system in the creation of said links (See Horowitz et al. column 10, lines 7-27, also see Horowitz et al. column 11, lines 1-24, and see Horowitz et al. column 12, lines 4-37.);

code for instructing said computer system to examine said list of identifiers to determine the hierarchical order of said identifiers within said list of identifiers (See Horowitz et al. column 10, lines 28-63, see table, also see Horowitz et al. figure 5, also see Horowitz et al. column 6, lines 41-45, wherein “list of identifiers” reads on “tag table”);

code for instructing said computer system to link a unit of information to at least one other unit of information based on the relative hierarchical order of identifiers (See Horowitz et al. column 12, lines 1-37) including;

an identifier identifying said unit of information (See Horowitz et al. column 9, lines 1-33); and

another identifier identifying said at least one other unit of information (See Horowitz et al. figure 5, also see Horowitz et al. column 57-67 and see Horowitz et al. column 6, lines 1-26).

See Office Action, 12/02/2005, pp. 2-3.

C. Withdrawal of the Rejection under 35 U.S.C. § 102(e)

Appellant respectfully disagrees with the Office Action’s characterization of the cited reference. “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” MPEP §2142. As described immediately below, Horowitz fails to teach or describe a list of identifiers having a user determined relative hierarchical order, examination of such a list for determining a hierarchical order of the identifiers, or linking of a unit of information to at least one unit of

information based on the relative hierarchical order of identifiers. Therefore, the Examiner has failed to establish a *prima facie* case of anticipation of Claims 1, 8, and 15 by Horowitz.

Horowitz in general teaches automatic generation of contextual hypertext links to other information based on a selected set of text. Horowitz Abstract. The contextual hypertext links are contextual because they are identified based on the context of terms found within the user-selected text by the tagging module. Horowitz Col. 2, lines 48-51, Abstract. The other information that serves as the target of the hypertext link is a document identified within a knowledge base of topics, hierarchical relations between topics, and associations of topics and terms. Horowitz Abstract.

Figure 8 in Horowitz provides an overview of the process taught in Horowitz. The tagging module 120 adds tags to a source document for each topic identified in the knowledge base 130 based on a selected portion 304. Horowitz Col. 7, line 66 - Col. 8, line 9. "A tag is a structure that associates a topic in the knowledge base 130 with a portion of a document that the other topic is about, and which portion can be used as a link to other data." Horowitz Col. 6, lines 36-39. In other words, a tag is a hyperlink. The tagging module 120 determines the topics in the knowledge base 130 that are about a selected portion 304. Horowitz Col. 7, lines 66-67. Therefore, the selected portion 304, which may be the whole source document, serves as the source for the topics. Horowitz Col. 8 lines 40-45. Certain terms are selected from those present in the knowledge base 130 based on the analysis described in relation to Figure 7. Horowitz Col. 9 lines 10-25. Finally, the term has an associated topic in the knowledge base 130 a tag is created associating the topic with the term in the source document. Horowitz Col. 9, lines 27-32.

Horowitz highlights the lack of user involvement in identifying topics and generating the tags. Horowitz Col. 2, lines 44-48. At most, the user in Horowitz defines the selected portion of text. Horowitz Col. 7, lines 59-63. Horowitz briefly describes hierarchical structures in relation to the topics in the knowledge base. Horowitz Col. 5, lines 65-67. Horowitz also describes an embodiment in which the terms in the selected portion may include multiple tags to multiple target documents. Horowitz Col. 7, lines 33-40. Figure 5 is described as a document hierarchy.

“User determined relative hierarchical order”

In contrast, the claimed invention teaches a list of stored identifiers arranged in a “user determined relative hierarchical order.” See Claim 1. Identifiers are names or titles for units of information and are easy to identify and recognize. Each identifier is distinct and separate from the unit of information that the identifier identifies. See Figure 6. The identifiers are stored separately from the units of information, instead of as tags within the source document as in Horowitz. Horowitz Col. 6, lines 41-42. The list of identifiers may be drafted by a user. See Claim 1.

This separation of identifier and unit of information facilitates organization and layout of the identifiers. The list of identifiers may be drafted by a user in a human readable format that permits ready understanding of the hierarchy and organization that will be applied to the associated units of information. “Listing 306 includes identifiers 308A and 308B which are placed or positioned, by the information developer, in the listing 306 in a hierarchical order along with other identifiers of the listing 306.” See Specification page 7, lines 8-10.

In the claimed invention, a user may alter the way units of information are linked by simply editing the listing of identifiers. A user can quickly and readily determine how to subsequently change links between units of information. It is impossible for a user of Horowitz to alter links in the source document. Horowitz shields the user from this task by automatically generating the tags, rather than deferring to a user determined hierarchy.

In the claim invention for example, as a result of indenting a first identifier and not indenting a second identifier within a listing, a parent/child link may be created so that the unit of information represented by the indented identifier is a child to the unit of information represented by the identifier not indented. Specification page 11, lines 20-27. This hierarchical order is then used in the claimed invention to produce the linking of one unit of information to at least one other unit of information. See Claim 1.

Appellant submits that Horowitz fails to teach or suggest a list of identifiers in a hierarchical order that is then used to direct a link management system in the creation of links. Appellant notes that each term in Claim 1 imparts meaning and life into the claim. Specifically, Appellant requests that proper weight be given to the phrase “user determined relative hierarchical order.” Appellant submits that a proper interpretation of the phrase “user determined

relative hierarchical order” requires that any hierarchical structures that exist in Horowitz be user determined.

The Examiner suggests that storage of said list of identifiers having a “user determined relative hierarchical order” is taught in Horowitz at Col. 10, lines 7-27, Col. 11, lines 1-24, and Col. 12, lines 4-37. Appellant disagrees. Appellant notes that these sections of Horowitz simply teach generation of contextual links and how these links may be presented to the user in various embodiments of Horowitz. From Col. 10 line 29 to Col. 11 line 24, Horowitz describes how to handle situations in which a tag has more than one link to target documents. Horowitz teaches that a menu of links may be generated using dynamic HTML. Horowitz Col. 10, lines 29-63. This menu is a user interface object that a user can then use to navigate to a desired link for a particular term. This concept is extended with the discussion of menus and sub-menus in Col. 11 lines 3 – 15.

Appellant submits that a user interface menu is fundamentally different from a list of identifiers having a “user determined relative hierarchical order.” Menus and sub-menus have have a hierarchical order. However, there is nothing in Horowitz to suggest that the order of the menus and submenus is “user determined.” Instead, since Horowitz generates these menus dynamically based on results from the tagging module 120 which receives its results from the knowledge base 130, one of skill in the art is left to guess as to how the order or hierarchical relationships for the terms or menu items is determined. More than likely, the order is determined solely based on the order in which the results are provided by the knowledge base 130. Consequently, the user is not involved in determining the order. The hierarchical order of menus and submenus is based on the hierarchical relationships defined in the knowledge base 130. Horowitz Col. 5, lines 65-67. Once again, the hierarchical order of menus and submenus is not determined by the user.

Appellant submits that the document hierarchy in Figure 5 of Horowitz is simply an illustration of how dynamically identified terms may be dynamically hyperlinked to a plurality of documents. Horowitz Col. 7, lines 32-40, Figure 5. The hierarchy in Figure 5 is not defined by a user. The hierarchy, if one exists, is defined by the tagging module 120 based on the number of documents retrieved for a topic as illustrated in elements 806 and 808 of Figure 8. Horowitz Col. 8, lines 5-9. In addition, Appellant submits that the hierarchy of inter-related topics in the

knowledge base 130 is fundamentally different from the list of identifiers in a hierarchical order. Horowitz Col. 5 line 65 – Col. 6 line 12. Topics are not the same as a list of identifiers. In particular, the topics are not in a user determined hierarchical order. Knowledge bases 130 typically are ordered by a database management system and typically do not include user defined order. Therefore, the topics of the knowledge base 130 are also not ordered by a user.

Examining a list for a hierarchical order

In addition, Horowitz fails to teach or disclose “code for instructing said computer system to examine said list of identifiers to determine the hierarchical order of said identifiers within said list of identifiers.” Claim 15. Appellant submits that because Horowitz fails to teach or disclose a list of identifiers in a hierarchical order, Horowitz naturally also fails to teach examination of this list of hierarchically ordered identifiers.

The Examiner suggests that this element is taught in Horowitz at Col. 10, lines 28-63, Col. 6, lines 41-45, and in Figure 5. Appellant disagrees. Appellant has explained that Col. 10, lines 28-63 teaches generation of user interface menus for terms that include multiple links or simply combining multiple terms into a convenient interface. There is nothing in this section to suggest examining a list of identifiers to determine a hierarchical order. In the code sample provided, the computer system simply executes the sample code and the hierarchy among the terms will be presented. There is no analysis of a hierarchical order that is then later used to direct the computer system to link units of information as explicitly recited in Claim 15.

Linking units of information based on the relative hierarchical order

The Examiner suggests that this element is anticipated by Horowitz at Col. 12, lines 1-37. Appellant disagrees. At Col. 12, lines 1-37, Horowitz clearly teaches generation of contextual links using the tagging module 120. As explained above, the tagging module 120 retrieves the information to generate the tags from the knowledge base 130. Accordingly, as pointed out above, the order in which the tags are generated is **not** determined by a user. At least Horowitz fails to teach any user involvement in defining the order or the hierarchical relationship between tags. At best, the hierarchical relationship is predefined in the knowledge base and the order of

the contextual links is based on the order in which the knowledge base 130 provides the links. Therefore, the order is not user determined nor is the hierarchy user determined.

Furthermore, Horowitz teaches linking a term or terms to a target document. Horowitz Col. 8, lines 5-9, 17-20. Appellant submits that claim interpretation of Claim 15 requires that each term of the claim be treated with equal importance. Therefore, the interpretation of the term “unit of information” should remain consistent for the entire analysis. Consequently, the “unit of information” must read on the term or terms or the target document but not both.

Appellant submits that the Examiner is attempting to twist the term “unit of information” using improper hindsight to suggest that linking of one “unit of information” to another “unit of information” is taught in Horowitz. Horowitz fails to teach linking of one “unit of information” to another “unit of information.” Keeping the analysis of “unit of information” consistent, Horowitz fails to teach linking of a term or group of terms to an other term or group of terms. Horowitz also fails to teach linking of a source document to a target document. In Horowitz, the source document does get linked to the one or more target documents. However, these are linked by way of the term or terms. Hence, Horowitz names the links “contextual links” in Col. 12 lines 1-37. The terms provide context for the links.

In contrast, the Claim 15 specifically recites linking “a unit of information to at least one other unit of information.” The claimed subject matter deals with performing link management for units of information such as web pages, help files, and the like. Specification page 1, lines 4-5. Specifically, the claimed invention links units of information together based on a hierarchy encoded in a listing of identifiers. Specification page 4, lines 21-27.

Appellant submits that if the source and destination for the link in Claim 15 were intended to be different objects, Claim 15 would recite different terms. However, Appellant recites that both the source and the destination are of the same type, both units of information. Horowitz fails to teach or suggest linking of two objects of the same type. Therefore, Horowitz does not anticipate this element of Claim 15.

DEPENDENT CLAIMS 2-7, 9-14, and 16-21

Given that Claims 2-7, 9-14, and 16-21 depend from one of independent Claims 1, 8, or 15 which are believed to be patentable as described above, Appellant respectfully submits that

the objection of Claims 2-7, 9-14, and 16-21 is moot. Accordingly, Appellant requests that the objection of Claims 2-7, 9-14, and 16-21 be duly withdrawn.

SUMMARY

In view of the foregoing, each of the claims on appeal has been improperly rejected because the Examiner has not properly established a *prima facie* case of anticipation for Claims 1, 8, and 15. Appellant submits that the foregoing arguments establish the novelty of the claims of the present application. Therefore, Appellant respectfully requests reversal of the Examiner's rejection under 35 U.S.C. § 102(e) and allowance of pending Claims 1-21. Accordingly, Appellant submits that Claims 1-21 are patentable.

Respectfully submitted,

Date: January 5, 2006

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8 E. Broadway, Suite 600
Salt Lake City, Utah 84101
Telephone: 801/994-4646



David J. McKenzie
Reg. No. 46,919
Attorney for Applicant

8. CLAIMS APPENDIX

The claims involved in the appeal, namely Claims 1-21, are listed below.

1. A link management system for creating links amongst units of information based on a list of identifiers arranged in an hierarchical order wherein each identifier identifies an associated unit of information, said system comprising:

means for storing said list of identifiers, wherein said list of identifiers has a user determined relative hierarchical order to direct said link management system in the creation of said links;

means for examining said list of identifiers to determine the hierarchical order of said identifiers within said list of identifiers;

means for linking a unit of information to at least one other unit of information based on the relative hierarchical order of identifiers including:

an identifier identifying said unit of information; and

another identifier identifying said at least one other unit of information.

2. The link management system of claim 1 wherein:

said units of information are units of target information;

each said identifier of said list of identifiers is adapted to identify source

information content of a unit of source information;

the system further comprises:

means for generating said units of target information;

means for examining said list of identifiers to identify said source

information content assigned to a unit of target information;

and

means for inserting said source information content into a unit of

target information based on the identifier of said unit of

target information identifying said source information

content.

3. The link management system of claim 2 wherein a plurality of source information content is assigned to a unit of target information.

4. The link management system of claim 1 wherein:

said units of information are units of target information;

each said identifier of said list of identifiers is adapted to identify source

information content of a unit of source information assigned to a unit of

target information;

said list of identifiers further comprises:

a first subset of identifiers for identifying said units of target information to be generated by said system, said first subset hierarchically ordered to indicate preferred linking of said units of target information;

a second subset of identifiers for identifying said source information content to be inserted into said units of target information identified by said first subset of identifiers;

said means for linking is adapted to link a unit of target information to at least one other unit of target information based on the relative hierarchical order of identifiers including:

an identifier of said first subset for identifying said unit of target information;

at least one other identifier of said first subset for identifying said at least one other unit of target information; and

said system further comprises:

means for generating said units of target information; and

means for inserting at least one source information content into a unit of target information based on an identifier of said second subset identifying said at least one source information content.

5. The link management system of claim 4 wherein said list of identifiers further includes a third subset of identifiers for identifying links for inter-linking units of target information.

6. The link management system of claim 5 wherein the means for linking is adapted to inserting URL links.

7. The link management system of claims 3 or 5 wherein said identifiers of said list are data tags of a markup language.

8. A method performed on a computer system operationally coupled to computer readable memory for storing a list of identifiers, and said method for creating and managing links amongst units of information based on said list of identifiers arranged in an hierarchical order wherein each identifier identifies an associated unit of information, said method comprising the steps of:

storing said list of identifiers, wherein said list of identifiers has a user determined

relative hierarchical order to direct a link management system in the

creation of said links;

examining said list of identifiers to determine the hierarchical order of said

identifiers within said list of identifiers;

linking a unit of information to at least one other unit of information based on the

relative hierarchical order of identifiers including:

an identifier identifying said unit of information; and

another identifier identifying said at least one other unit of
information.

9. The method of claim 8 wherein:

said units of information are units of target information;

each said identifier of said list of identifiers is adapted to identify source

information content of a unit of source information;

the method further comprising the steps of:

generating said units of target information;

examining said list of identifiers to identify said source information

content assigned to a unit of target information; and

inserting said source information content into a unit of target

information based on the identifier of said unit of target

information identifying said source information content.

10. The method of claim 9 wherein a plurality of source information content is
assigned to a unit of target information.

11. The method of claim 8 wherein:

said units of information are units of target information;

each said identifier of said list of identifiers is adapted to identify source

information content of a unit of source information assigned to a unit of

target information;

said list of identifiers further comprises:

- a first subset of identifiers for identifying said units of target information to be generated by said system, said first subset hierarchically ordered to indicate preferred linking of said units of target information;

- a second subset of identifiers for identifying said source information content to be inserted into said units of target information being identified by said first subset of identifiers;

said step of linking is adapted to link a unit of target information to at least one other unit of target information based on the relative hierarchical order of identifiers including:

- an identifier of said first subset for identifying said unit of target information;

- at least one other identifier of said first subset for identifying said at least one other unit of target information; and

said method further comprising the steps of:

- generating said units of target information; and

- inserting at least one source information content into a unit of target information based on an identifier of said second subset identifying said at least one source information content.

12. The method of claim 11 wherein said list of identifiers further includes a third subset of identifiers for identifying links for inter-linking units of target information.

13. The method of claim 12 wherein the step of linking is adapted to inserting URL links.

14. The method of claims 10 or 12 wherein said identifiers of said list are data tags of a markup language.

15. A computer program product for use in a computer system operatively coupled to a computer readable memory, the computer program product including a computer-readable data storage medium tangibly embodying computer readable program code for directing said computer to create and manage links amongst units of information based on a list of identifiers arranged in an hierarchical order wherein each identifier identifies an associated unit of information, said computer program product comprising:

code for instructing said computer system to store said list of identifiers, wherein

said list of identifiers has a user determined relative hierarchical order to

direct a link management system in the creation of said links;

code for instructing said computer system to examine said list of identifiers to

determine the hierarchical order of said identifiers within said list of

identifiers;

code for instructing said computer system to link a unit of information to at least one other unit of information based on the relative hierarchical order of identifiers including:

an identifier identifying said unit of information; and

another identifier identifying said at least one other unit of information.

16. The computer program product of claim 15 wherein:

said units of information are units of target information;

each said identifier of said list of identifiers is adapted to identify source information content of a unit of source information;

said computer program product further comprises:

code for instructing said computer system to generate said units of target information;

code for instructing said computer system to examine said list of identifiers to identify said source information content assigned to a unit of target information; and

code for instructing said computer system to insert said source information content into a unit of target information based on the identifier of said unit of target information identifying said source information content.

17. The computer program product of claim 16 wherein a plurality of source information content is assigned to at least one unit of target information.

18. The computer program product of claim 15 wherein:
- said units of information are units of target information;
- each said identifier of said list of identifiers is adapted to identify source information content of a unit of source information assigned to a unit of target information;
- said list of identifiers further comprises:
- a first subset of identifiers for identifying said units of target information to be generated by said system, said first subset hierarchically ordered to indicate preferred linking of said units of target information;
 - a second subset of identifiers for identifying said source information content to be inserted into said units of target information being identified by said first subset of identifiers;
- said code for instructing said computer system to link is adapted to link a unit of target information to at least one other unit of target information based on the relative hierarchical order of identifiers including:
- an identifier of said first subset for identifying said unit of target information;
 - at least one other identifier of said first subset for identifying said at least one other unit of target information; and
- said computer program product further comprises:

code for instructing said computer system to generate said units of target information; and

code for instructing said computer system to insert at least one source information content into a unit of target information based on an identifier of said second subset identifying said at least one source information content.

19. The computer program product of claim 18 wherein said list of identifiers further includes a third subset of identifiers for identifying links for inter-linking units of target information.

20. The computer program product of claim 19 wherein said code for instructing said computer system to link is adapted to inserting URL links.

21. The computer program product of claims 17 or 19 wherein said identifiers of said list are data tags of a markup language

9. EVIDENCE APPENDIX

There is no material to be included in the Evidence Appendix.

10. RELATED PROCEEDINGS APPENDIX

There is no material to be included in the Related Proceedings Appendix.